

## Public Works

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### Call on CPW contracts...

here can you find reliable help to ensure your water distribution system is safe? Determine the costs of keeping a utility—versus letting it go? Train your boiler operators? Teach your staff how to implement a JOC contract?

Manage repairs and preventive maintenance for your roof inventory? Figure out how to use IFS-M to do a special data call?

CPW contracts can be called upon to help you meet these needs and a host

for management decisions, information, planning, programming & budgeting, also for training and infrastructure maintenance support.

of others. CPW contracts are managed by a CPW subject matter expert COR, and administered by Baltimore District. They are principally indefinite quantity, indefinite delivery order contracts. Installations, Corps Districts and Divisions and others can call on the contracts to address a wide variety of needs at military installations around the world.

Typically, our contracts focus more on privatization, training, support and sustainment services, preventive maintenance/life cycle man-

agement issues, and business process and management support. Some ancillary design and AE services are provided through the contracts, though these are principally aimed at repair projects and items such as electrical system design for a facility or small group of facilities.

Our "arsenal" is stocked with the small arms needed to fight the daily skirmishes in the installations' ongoing battle to maintain infrastructure in safe and sound condition and business operations in the most effective mode. Energy savings, safer structures, better business operations and planning, better life-cycle management for infrastructure and smooth-running ADP systems—these are the areas we help the Army address. Our customers can count on us to cut the overhead costs associated with drawing up scopes of work, letting and administering a contract. We can also provide the quality assurance support installations need to ensure they are spending their scarce funds on effective support services.

Corps Districts and Divisions can tap services provided through these contracts to offer low-cost support worldwide to the installations they serve. We are also happy to share our statements of work and other background information with Districts and Divisions whose volume of work in a particular area means they need a contract of their own.

Review the descriptive inventory presented. See something you'd like to explore? Call or e-mail the U.S. Army Center for Public Works contact person listed as Point of Contact. They are technical and subject matter experts who can help match your needs to the right services. For the best in public works support—call on us!

# Contracts administered by CPW CORs available to Army

- ADP management support
- Boiler/cooling water treatment/engineering
- Boiler inspection
- Boiler operator training
- Bridge inspection, load analysis, scour inspection, bridge component repair analysis
- Cathodic protection/corrosion engineering
- DIESS (Defense Industrial Engineering Support System) information technology resources
- Electrical power systems engineering work
- Energy audit and retrofit
- Engineered Management Systems:
  - PAVER
  - RAILER
  - ROOFER
- Gas systems, on-site evaluations
- Gas systems training classes
- JOC (Job Order Contracting) technical support services
- Lead-based paint abatement
- Mechanical and electrical A/E services
- Power reliability assessment A/E contracts
- Real Property Maintenance Activities support worldwide
- Solid waste management
- Water treatment/boiler water QA services
- Water/wastewater/environmental studies/analysis & O&M review
- Utility privatization studies (life-cycle cost analysis and negotiation support)
- Utility rate intervention assistance (service studies and expert witness testimony



### **Descriptive Inventory of CPW Contracts**

#### ADP management support—

Provides functional expertise and automated data processing systems management support to Directors of Public Works and other U.S. Army Center for Public Works customers. Studies and analysis, guidance document support, deployment support, sustainment assistance and integration support.

POC is **Mary Chyz**, (703) 428-7461 DSN 328. e-mail: mary.l.chyz@cpw01. usace.army.mil



Mary Chyz

### **Boiler/cooling water** treatment/engineering—

Cervices include on-site eval-**J**uation or failure analysis of heating or cooling systems, training in cooling and boiler water treatment, evaluation of chemical treatment contracts, and evaluation of new technologies for boiler/cooling water treatment.

POC is Nelson Labbé, (703) 806-5202 DSN 656, e-mail: nelson.c.labbe@cpw 01.usace.army.mil

Nelson Labbé

#### **POC is Phil Conner**, (703) 806-6068; e-mail: phil.j.conner@cpw01.usace.army.mil

#### Bridge inspection, load analysis, scour inspection, component repair analysis-

For both highway and railroad bridges. Includes design review and repair recommendations.

**ORDITION STAIL NOT SELECT OF STAIL NOT SELECT SELECTION (703)** 806-6053 DSN 656, e-mail: terry.r.stanton@cpw01.usace.army.mil

#### Cathodic protection/corrosion engineering—

Provides AE services in the area of corrosion control for underground storage tanks, utility lines, water towers, bridges and the like. Recommends mitigation measures for buried or submerged systems. Provides training in corrosion control and cathodic protection.

🏶 POC is **Jane Anderson**, (703) 806-5214 DSN 656, e-mail: jane.l.anderson@cpw01. usace.army.mil



### **DIESS (Defense Industrial Engineering Support System)** Information Technology resources services—

Provides telecommunications, computer resources, and Engineering communications gineering services in support of computer-aided time standards, that is, engineering response standards for Real Property maintenance, business re-engineering, and methods, time, and measurements standards.

**OPENIE OF SERVIT PROPRIED (1984)** POC is **Fred Reid**, (703) 428-6358 DSN 656, e-mail: fred.a.reid@cpw01.usace.army.mil

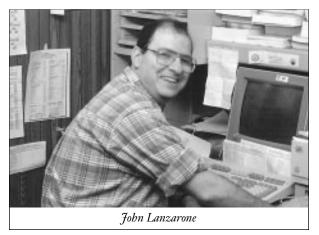


**P**rovides on-site training to boiler operators with specific attention to the systems they are operating and maintaining.

**P**OC is **John Lanzarone**, (703) 806-6067 DSN 656, e-mail: john.r.lanzarone@cpw01. usace.army.mil

### **Boiler inspection—**

Provides on-site boiler safety inspection by expert company in this field. Inspections as required by AR 420-49, detailed deaerator tank inspections, failure analysis on boilers and their components, integrity studies of boilers, pressure vessels and deaerator tanks.



### **Electrical power systems** engineering—

Cite surveys, courses and workshops **J**for engineers and technicians, data collection and preparation of items including technical manuals for O&M, line diagrams, data collection manuals, short circuit, lighting and surge protection and protection coordination studies, peak shaving studies, power reliability analyses, grounding studies, cost benefit studies, upgrade concep-





tual designs and many more studies and evaluations of motors, lighting, and power reliability features of electrical systems.

POC is Peter Cascio, (703) 806-5169 DSN 656, e-mail: peter.b.cascio@cpw01. usace.army.mil

#### **Energy audit** and retrofit-

Provides on-site energy conservation analysis and construc-

tion services for selected technologies. Focus is on fluorescent and incandescent lighting, small-motor retrofits, steam trap

condition surveys, and exit light fix-

🦚 POC: **Jim** Paton, (703) 806-6091 DSN 656, e-mail: jim.b.paton @cpw01.usace. army.mil



### **Engineered** management systems:

**DAVER**—Inspection and implementation of maintenance and repair plans for pavements and airfields. Work includes network identification, technical record review, visual inspection based on standard distresses, network and sections drawings, final report with analysis and long-range work plans. Training on use of the system is also included in the contract.



POC is **Ali Achma**r. (703) 806-6058 DSN 656, e-mail: ali.a.achmar@cpw01. usace.army.mil

**DAILER**—Inspection and Nimplementation of maintenance and repair plans for railroad rack. Work includes network identification, technical record review, visual inspection based on standard deficiencies according to TM 5-628, network and section drawings, ultrasonic rail inspection, automated geometry testing and railroad crossing inspections.

**%** POC is **Mike Dean**, (703) 806-6050 DSN 656, e-mail: mike.dean@cpw01.usace.army.mil

**ROOFER** is an automated engineered management system (EMS) that provides the user with a cost-effective program for managing builtup and single-ply membrane roofs. Services include inventory of roofing assets, development of detailed roof plans, detection of defects through visual inspection and aerial infrared (IR) roof scans.

🦚 POCs are **Dave C. Bohl**, (703) 806-5988 DSN 656, e-mail: david.c.bohl@cpw 01.usace.army.mil, and **Jim Ledford**, (703) 806-5990 DSN 656, e-mail: jim.w. ledford@cpw01.usace.army.mil

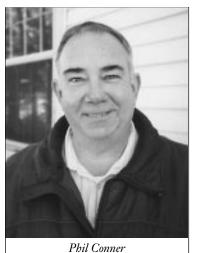


Dave C. Bohl

#### **Gas systems, evaluation of—**

I.S. Department of Transportation experts evaluate the con-Udition of systems, review practices and procedures applicable to design, management and operation and maintenance of installation gas systems. A report with recommendations to improve efficiency and safety of the systems is provided to the installation.

**N** POC is **Phil Conner**, (703) 806-6068 DSN 656, e-mail: phil.j.conner@cpw01.usace.army.mil



### **Gas systems** training—

lass providing essential knowledge and skills for personnel involved in management, design, installation or operation and maintenance of gas distribution systems.

POC is **Phil Conner**, (703) 806-6068; e-mail: phil.j.conner@cpw01.usace. army.mil

### **JOC (Job Order Contracting)** technical support services-

Maintenance, cost engineering and production of JOC technical documents, maintenance and distribution of JOC software. Also provides on-site training of JOC Proposal



Development System (JOCPDS) for installation personnel using and managing Job Order Contracts.

POC is Tim Sweeney, (703) 428-8184 DSN 328, e-mail: tim. sweeney@cpw01.usace. army.mil

#### Lead-based paint (LBP) abatement—

ndefinite quantity contract for numerous line items of work that can be combined as needed to accommodate

installations in meeting the requirements of their lead hazard management programs. Services include LBP risk assess-

> ments, paint inspections, abatements, in-place managements, disposal, and disposal testing.

Tim Sweeney

**POC** is **Chuck** Racine, (703) 806-5025 DSN 656, e-mail: charles.w. racine@cpw01.usace.army.mil



Chuck Racine

#### **Mechanical** and **Electrical AE Services**–

Cervices address all me-**J**chanical engineering aspects of operation and maintenance of utility plants and systems at Army facilities worldwide. These services include: engineer-

ing studies and surveys, preparation of manuals, reports and

SOPs, project development, testing, adjusting, balancing services, one-line drawings using CADD, troubleshooting and expert advice, and engineering analysis.

**P**OC is **Dennis Ve**vang, (703) 806-6071 DSN 656, e-mail: dennis.i.vevang @cpw01.usace.army.mil

#### Power reliability—

Indefinite delivery AE contracts that field activities can use. Services include engineering studies, reliability analyses, troubleshooting



Dennis Vevang

and expert engineering advice, preparation of drawings and project documentation, TOP SECRET level clearances provided.

POC is **Peyton Hale**, (703) 428-8191 DSN 328, DSN 328; e-mail: peyton.s. hale@cpw01.usace.army.mil

#### RPMA support worldwide-

Trains installation personnel In the use of IFS-M (Integrated Facilities System-Mini/Micro), Engineering Performance Work Estimating, and Real Property.

**《** POC is **Mary Chyz**, (703) 428-7461 DSN 328, e-mail: mary.l.chyz@cpw01.usace.army.mil



Peyton Hale



#### Solid waste management—

 $\mathbf{S}_{\mathbf{S}}$  ervices include waste characterization studies, opportunity assessments and implementations or enhancements for source reduction, procurement guidelines for reusable, recyclable, compostable, and combustible materials, training for solid waste management, and economic evaluations of various solid waste measures and methods.

**%** POC is **Laura Seabeneck**, (703) 806-5212 DSN 656, e-mail: laura.e.seabeneck@cpw01.usace.army.mil

### Water treatment/boiler water OA services—

**P**rovides analysis and evaluation of various water samples from steam and hot water boiler systems including condensate, deposit, and feedwater analysis and evaluation. Evaluations provide quality assurance for preventing scale and corrosion that could ruin a boiler.

**Nelson Labbé**, (703) 806-5202 DSN 656, e-mail:





nelson.c.labbe@cpw01.usace. army.mil or **Crispus Sawyer**, (703) 806-5206 DSN 656, e-mail: cris.e.sawyer@cpw 01.usace.army.mil



#### Water/wastewater/ environmental studies/ analysis and 0&M review-

**P**rovides AE services for potable water treatment, wastewater treatment and pollution control, water and wastewater plant O7M training, cross-connection control and backflow prevention surveys and training, O&M manuals preparation.

POC is **Bob Fenlason**, (703) 806-5201 DSN 656, e-mail: bob.w.fenlason@cpw01.usace.army.mil

### Utility privatization studies—

Life cycle cost analysis and negotiation support. Provides analysis comparing continued Government ownership operation and maintenance of Army utilities with privatized utility ownership and operation. Also provides for utility systems inventory, cost of service data, and negotiation assistance.

POC is Kevin Mc-Culla, (703) 428-6462 DSN 328, e-mail: kevin.m.mcculla @cpw01.usace.army.mil



### **Utility rate intervention assistance—**

**P**rovides expert testimony on behalf of the Army based on contractor's cost of service study before state and federal utility regulatory authorities.

POC is **Ed Gerstner**, (703) 428-6460, DSN 328, e-mail: edward.j.gerstner@cpw01.usace.army.mil

### Real property POC update

PW needs your help in updating our list of "active" Army real property managers, master planners and GIS managers in all components— Active Army, USAR, ARNG. We try to maintain our list from requests for VISIONS, PROSPECT and workshop attendance records, and sometimes, MACOM news. Inevitably, the list gets out of date. Please help us by validating your POC data. Here's what we need:

- Name
- Title
- Mail address
- Phone (commercial and DSN)
- FAX
- E-mail

E-mail your reply to Fredrik.W.Wiant@cpw01.usace.army. mil or FAX to (703) 428-9453. PWD





### **Prime Vendor delivers!**

order today, have needed supplies in your hands day after tomorrow—that's what Prime Vendor delivers. The Army is now evaluating Prime Vendor as a means of getting the goods into your hands that bypasses the Army Supply System.

What would you say to a supply system that could give you these features, that you, as an Army facility customer, want and need? How about: product choice, reliable delivery on time, emergency support capability, low delivered price, easy order and return electronic process system using commercial off the shelf software, product exchange on next regular delivery schedule, commercial items, rebates, discounts, warranties, and an easy process of paying for material received (not ordered). You may also want to have services like project planning, ordering assistance, and job order cost recording. Would you like to be advised of material order status by electronic mail, availability, delivery time, and available alternative? All this can soon be available to you.

Through the Prime Vendor Maintenance, Repair & Operating (MRO) Installation Supply Concept, you can order and receive supplies directly from vendors. This concept reengineers the acquisition process, providing excellent service for Army installations.

The Prime Vendor MRO is a contract process first used by the U.S. Marine Corps. The Marines awarded a contract to a single distributor, who agreed to provide facility supplies within 48 to 72 hours.

The Marine and contractor partnership currently supplies plumbing, heating, air conditioning, refrigeration, electrical, building material, small tools, paint, and hardware. The supplier hopes to produce a catalog of over 8,000 items for electronic ordering over the internet. Normally scheduled deliveries arrive three times each week, with emergency orders as requested.

The Army already has a Prime Vendor for food supplies. This contract demonstrates that validated contractors can successfully provide Army food distribution services to military installations.

by Larry Black

How does the food Prime Vendor contract work? Commercial distributors deliver food directly to dining facilities, hospitals, or warehouses. The partnership has established an electronic interface between the Defense Personnel Support Center (DPSC), the installation, and the prime vendor. Three deliveries per week arrive at each Army installation. Records show reduction in Department of Defense (DoD) distribution, transportation, and inventory management requirements and costs.

Region

Army customers receive increased variety of products, and national brand selections as well as reduced delivery times and improved food quality through fresher products.

Considered a smashing success, Prime Vendor evaluations for other food and other types of supplies has already pro-

duced these 1996 benefits, savings or cost avoidances for the Army:

- 247,360 square feet reduction in needed storage space.
- 87 fewer manpower spaces.
- 94.5% customer satisfaction rating (above average to excellent).
- Preference rating of 91.3% for Prime Vendor by implementing installations.
- Delivery in 24 to 48 hours direct from the vendor to installations: just one example— 9,000 tires and 15,000 vehicle batteries to Fort Hood.
- Pharmacy reduction saving \$33 million in drug inventory.

The expected impacts of the Prime Vendor MRO on Army installations include:

- Smaller inventory and less required warehouse space.
- Fewer staff to receive, store, and issue.
- Need for planning and good management skills.

- Accountable officer, automation support.
- Establishment of a contingency plan and contingency stocks

Installations will not be obligated to use the Prime Vendor MRO contract. A vendor will become the provider of choice, based on ability to meet the customer's needs. Installations will retain the other options to obtain material as needed. Defense Logistics Agency (DLA) implementation program proposes ten regions to establish long-term, "Best Value" contracts.

**Award date** 

1-Southeast ..... Feb97

2-Southwest ...... May 97

3-Hawaii ...... May 97

4-Northeast ...... May 97

5-Northwest ...... Aug 97

6-South Central ...... Aug 97

7-Pacific ...... Oct 97

8-North Central ...... Oct 97

9-Europe ..... Oct 97

10-Alaska ..... Oct 97

DLA will negotiate the "Best Value" source selection criteria and contract option years for each region for a long-term partnership with a quality contractor. DLA will assign customer representatives to installations with a program manager and program team, which will be self-contained

and customer-focused. Both formal and informal periodic reviews will be made to monitor customer satisfaction.

DLA will test the MRO concept at Fort Jackson this summer to resolve any Army-unique problems. Armywide implementation should follow to apply the Prime Vendor MRO.

The ACSIM Facility Policy Division will provide oversight of the MRO process and Fort Jackson test to adjust existing Army facility policy. The DLA Defense Industrial Supply Center will implement MRO and coordinate with the U.S. Army Center for Public Works, Headquarters Major Army Commands, National Guard, Army Reserve, and installations. All Army installations, the National Guard, and the Army Reserve should consider implementing the Prime Vendor MRO process.

**♦** POC is Larry Black, DAIM-FDF, (703) 428-6173 DSN 328. **PWD** 

Larry Black works in the Facilities Policy Division of the ACSIM.

### by Alexandra K. Stakhiy

#### errick Mitchell grew up in Houston, Texas, graduating magna cum laude from Prairie View University with a major in architecture and engineering. During his last year of school, he took a break to gain some work experience as background for his master's thesis. As a college coop with the Naval Sea Systems command, he became so enamored with the

Washington D.C. area that he decided to return after graduating from college.

His first professional job was with the Patent and Trademark Office of the Department of Commerce, where he was a mechanical patent examiner. All too soon, he began to feel that he was losing the architectural skills he had gone to school for and began searching for another job—one as an architect. In an effort to broaden his skills, Derrick joined the Army National

Guard Reserve, where he became a military policeman, a position he still holds today. Being a Reservist gave him the confidence he needed to land a job with the prestigious architectural firm of Delon Hampton and Associates and become part of a joint venture to revamp National and Dulles Airports. "It was very satisfying work, and I felt very honored to be working on buildings I had studied about in college," said Derrick.

Desert Storm interrupted his idyllic life, and when Derrick returned after eight months of guarding prisoners and working customs, he felt underutilized at Delon. He started looking at jobs again.

In May 1993, Derrick joined the staff of CPW's Real Property and Planning Division as an architect intern to work on space planning and utilization. Cross-trained in real property from the beginning, Derrick became the DR REAL point of contact for the Corps of Engineers, the National Guard, and the Reserves. DR REAL, or Desktop Resource for Real Property Management, a standalone real property accountability system for IFS, is mainly used by installations too small to support IFS. Installations would submit their information to Derrick on a disk and, after performing a quality assurance check, he would load it into HQIFS. He answered questions and helped with problems.

Derrick also took over the McKinney Act" Shelter for the Homeless" projects and helped put together the procedures for turning over unused, underused and excessed property on military installations to the homeless. Installations report underused or unused facilities to Derrick, who

## **Planning and Real Property Division**



(Photo by Richard Brown.)

puts them in CPW's database, sending a copy to HUD. He acts as the POC for any questions concerning those properties among MACOMs, installations and Human Health Services, HUD and organizations for the homeless.

"I help to define and explain the law (McKinney Act) and its application to specific problems on installations," said Derrick.

Today Derrick is taking advantage of the courses he took as an intern to learn how the Army does its master planning. He is using HQIFS to follow historical facilities on Army installations and assist installations with their master plans and tracking of real property.

"Too often facilities are listed in IFS as historical facilities but do not appear on the Federal Register as such," said Derrick. "I try to explain the procedures installations must follow and the specific criteria

they must meet to qualify their facilities for the Federal Register."

"Don't rely on old methods," advised Derrick. "This can lead to a cycle of duplicating errors. Find out for yourself what the rules and regulations are. Too often we go by how things were done before, rather than checking to see if this is the right and best way to get the job done. Know the timelines. How can you meet a suspense if you are not aware of the deadline date? If you don't know something, don't be afraid to ask questions and seek guidance. The better we communicate, the better we can operate."

Recently, Derrick has branched out to space planning with CADD (Computer-Aided Design and Drafting). He is helping installations to digitize their floor plans instead of using the traditional method of relying on manually-drafted blueprints. "CADD allows installations to update changes faster and cheaper with a more accurate description of how an installation is using its space," said Derrick. "Traditionally, space is designated and allocated according to rank, but in reality, this is not always the case." Derrick is currently working with Detroit Arsenal, on their new computerized space management system, which, when finished, will keep track of over 1,000,000 square feet of space and more than 4,000 personnel.

Derrick enjoys photography and chess and is an avid fan and player of "just about any sport." You may reach him at (703) 428-6083 DSN 328 or e-mail: derrick.mitchell@cpw 01.usace.army.mil PWD



# Plastic landfill cover saves a lot of dirt

by Richard Brown

novel approach to landfill management has been saving Fort Hood both dollars and space. Instead of covering its municipal landfill with six inches of dirt every day, the Texas post gets its trash covered once a day by a single sheet of plastic that's about the thickness of two sheets of paper.

The plastic sheet is a .02 millimeter thermo-degradable polymer, which takes only a couple of days to degrade. Most importantly, the plastic traps odors, and if animals, birds and insects don't smell the garbage, they don't go after it, according to Kathy McPherson, with the DPW's Engineering Plans and Services Division, who researched and wrote the new landfill contract.

At the end of each day, a bulldozer-like vehicle called a daily rover, which carries a 16-foot-wide roll of the plastic, backs over the municipal waste trench and lays down the plastic sheet, and simultaneously secures the sheet with small scattered piles of sand.

Fort Hood is the first military instal-



A bulldozer-like machine called a daily rover rolls a plastic sheet and a layer of sand over a cell of the municipal landfill trench at Fort Hood.

lation ever to try this approach to municipal landfill management, and the fourth municipal landfill in Texas to do so, according to McPherson. An interim contract using the new approach was implemented in January 1996, and the current contract started in September, resulting in a cost avoidance of \$600,000 per year.

The Texas Natural Resource Conservation Commission required that the post's municipal landfill be limited to a 27-foot depth from top to bottom, and also required that each day's garbage be covered with six inches of dirt. Fort Hood had to pay increasingly higher prices for a solid waste contractor to bring soil in from an outside source to provide the daily soil covering.

Because of the required six-inch soil covering, the municipal landfill trenches were filling up too quickly and the post's landfill acreage was rapidly expanding. Because the State of Texas allowed Fort Hood to use the plastic alternate daily cover for its municipal trench, Fort Hood has been able to put more garbage in each landfill cell and dramatically slow down the increase in landfill acreage expansion.

By way of comparison, the nearby city of Killeen pays five times as much as Fort Hood per ton to dispose of municipal waste, and the nearby city of Copperas Cove pays six times as much as the post, McPherson said.

The new contract with the Inland Service Corporation out of Lawton, Oklahoma, has enabled the DPW to transfer solid waste management related professional engineer duties to the contractor, freeing up the DPW's regular staff for their regular missions.

Fort Hood also saves municipal landfill space by diverting used concrete and gravel into building foundation materials rather than landfilling it, according to McPherson. Under the terms of



Each roll of plastic is about as thick as two sheets of paper. The rover covers the plastic with just enough sand to keep it weighted down.



the contract, the contractor also must:

- Reuse, or turn in whatever they can to the local Defense Reutilization and Marketing Office.
- Recycle aluminum, paper, cardboard, plastic, glass and ferrous metal cans.
- Compost leaves, brush, untreated wood waste and vegetable waste.

In addition to the municipal waste trenches, the post landfill also has a trench for such special waste as leadbased contaminated paint from demolished buildings, McPherson said. But the plastic liner is not used for these trenches, which must still be covered with six inches of soil every day.

POC is Kathy McPherson, (817) 287-4564 DSN 737. PWD

Richard Brown is a public affairs specialist in CPW's Customer Relations Office.



After each pass of the rover over the cell, the operator gets out and cuts the new plastic cover off at the end of the cell.

### **Commander's Guide on Violence Protection available**

ot off the presses and just released is a Violence Prevention Commanders Guide. Copies were mailed to MACOMs, and MACOMs are to make distribution to subordinate installations.

The guide was prepared by DC-SPER-HR and coordinated with ASA(M&RA). It contains a strong statement signed by the Secretary of the Army and the Chief of Staff urging Army leadership to take a proactive approach to violence prevention, including workplace violence, as it affects the Army work force and its readiness.

The guide concentrates on identifying "at risk" organizations (for military) and overall installation indicators of risk (for civilians). It does not require commanders to establish a structure to manage a garrison violence prevention program; however, it emphasizes that violence prevention is a command responsibility. It discusses the personnel resources already available, in many cases, and presents a framework for using those resources to combat violence on an installation.

The guide suggests that recognizing the different types of violence and clustering different combinations of available personnel resources is an effective way to defuse and prevent potential vio-

If you are involved in workplace violence and haven't had an opportunity to review the guide, contact your MACOM counterpart and find out whether the guide has been distributed to the installation level.

POC is Nancy Skates, (703) 325-1334 DSN 221 or e-mail skatesn@ asamra.hoffman.army.mil. PWD

### **U.S. Army War College Library** garners Hammer Award

he United States Army War College (AWC) Library has been selected for the Vice President's prestigious Hammer Award. The Hammer Award is presented to teams of federal employees who have made significant contributions in support of reinventing government principles. The Award is Vice President Al Gore's answer to outdated government processes, as represented by the infamous "\$400 hammer."

The AWC Library team's accomplishments are a tribute to "doing things better through automation," according to Library Director Bohdan Kohutiak. The nomination cited improved purchase request procedures, reinvented work flow for automated catalogue procedures, and a library homepage via the internet for easy access to library resources.

"Each day, the library staff helps senior military leaders prepare for future challenges at the least cost to the taxpayer," said Kohutiak.

As part of an outreach initiative, library information and the on-line catalog are available through internet access via http://carlislewww.army.mil/ library/.

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### Consolidated contracts ease headache of portable toilets

by Richard Brown

Vou see them dotting the landscape at construction sites and festivals — little buildings with bold green and red signs that say "occupied" or "vacant." We call them porta-potties, porta-johns, rent-a-cans, and so forth, and we just can't get by without them.

Soldiers in the field are no different. Let's face it, today's Army has come a long way from grandpa's "roughing it" stories about C-Rations, metal mess kits and his trusted M-1 rifle.

Where today's soldier goes in the field, the portable toilet must follow — usually serviced by someone like Brown and Root or Johnson Controls.

Up until very recently, both troop units and garrison organizations at Fort Hood, Texas, got their portable sanitation units (PSUs) from a multitude of contractors. The DPW alone had more than 80 such individual contracts, and troop units at the company level were contracting for their own portable toilet service every time they went to the field for training.

Service was sporadic, quality control was poor, and customers were not happy.

So the III Corps Commanding General ordered his DPW to look into ways of consolidating all portable toilet contracts at Fort Hood for garrison activities like the DPW and the Di-

rectorate of Community Activities (which manages baseball fields, festivals and so forth), as well as troop units, tenant activities and Reserve units.

For a two-combat-division post like Fort Hood, where the training ranges are continually in use, making arrangements with a multitude of contractors for portable toilet support had become an increasingly unacceptable hassle — an unnecessary drain on time and energy that was detrimental to both training and readiness.

"Units were telling me the PSUs were two percent of their budgets and 98 percent of their headaches," said Kathy McPherson, who works in the DPW's Engineering Plans and Services Division. She also wrote the performance work statement for the DPW's consolidated PSU contract, which started November 1, 1991.

"Troop units had already voted to 'join the PSU club' unanimously," McPherson said.

But this contract for garrison organizations only covered 20 percent of the post's portable toilet needs. The people at III Corps G-3 were skeptical about

These organizations were brought in under a second consolidated contract in March 1996.

Before the consolidated contract, unit commanders had to plan for portable toilet support more than two months in advance of a field training exercise. And when a unit in the field moved to another training location, they had no legal means of moving the toilet with them, since the toilet was the property of the contractor. And once the toilet was moved, the contractor could no longer service it.

To call the contractor to move it would be an unauthorized procure-

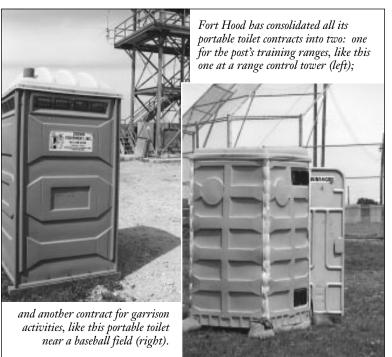
ment, according to McPherson. But the consolidated contracts, which are paid for up-front at a flat rate, are flexible enough to meet the needs of units training in the field, regardless of where the units train or how often the toilets need servicing.

The DPW contractor also takes care of the post's permanent "vault" latrines. After a thorough inventory of the post, they bulldozed some of these buildings; but others they improved, ventilated and cleaned out. They made many of these latrines usable again, according to McPherson. This is important because vault latrines are much more economical than portable toilets. Now all 54

of Fort Hood's vault latrines are serviced by the same contractor who services the portable toilets.

All the vault latrines come under the DPW's contract, and all of G-3 Range Control's toilets are the portable, temporary PSUs. Employees of both contractors must also know enough about the training mission to avoid venturing onto a range in the middle of a live-fire exercise. They get both Range and Explosive Ordnance Detachment training.

POC is Kathy McPherson, (817) 287-4564 DSN 737.



the potential for savings, and were not enthusiastic about the requirement to fund a consolidated contract up-front. They were concerned that up-front funding would make it harder to ensure unit accountability for training dollars.

But after two years under its consolidated contract, the DPW was able to show the people at G-3 Range Control substantial savings, according to McPherson.

So the III Corps G-3 decided to follow suit with troop units, Reserve units and the post's tenant organizations.



### **Well-designed buildings** enhance mission

by Thomas R. Rutherford

66 CERL studies

confirm that

productivity can

be improved

through excellent

facilities. "

ou can easily achieve productivity gains of 5 to 35 percent. How? Design your facility work space in such a way that it gives the occupant maximum personal control of the environment.

I have found that you only need a productivity gain of 3.8 percent to pay

for all facility costs over the 30-year life of a building. This discovery is startling in itself, but even more surprising is the lack of appreciation of this fact by the business, industrial and academic community in America.

When the leader in charge of a mission begins to understand this concept, the facility be-

comes an investment on the bottom line versus an overhead expense to be reduced. People are the most costly element of most business processes in

I have found that **people** consume more than 95 percent of all costs, in terms of building life-cycle cost evaluations, when the cost of the people in the building are included. Certainly, it is unwise to focus on reducing building costs when the people are the primary cost element and the building, while consuming only 5 percent of costs, has such a significant impact on productivity.

You must design your facility to enhance mission execution versus reducing it to the lowest possible first cost. Additionally, if the building is designed for maximum flexibility to meet changing missions in the future, it can be looked at as an appreciating asset rather than a depreciating liability.

My work with the U.S. Army Civil **Engineering Research Laboratory** (CERL), ABSIC at Carnegie Mellon University and discussions with colleagues across America confirms that productivity can be dramatically enhanced or degraded. It all depends on how well the facility supports the peo-

ple. Dr. Volker Hartkopf, Director of the Center for Building Performance and Diagnostics and the Advanced **Building Systems Integration Consor**tium at Carnegie Mellon University, speaks to a 40 percent swing. Hartkopf indicates that productivity can easily swing upward by 20 percent or degrade

by 20 percent from the baseline of a "so-called average building."

CERL has uncovered some 45 studies confirming that productivity can be improved through excellent facilities.

What are the key elements to be considered when designing or selecting a building to enhance mission?

 Adequate Space—probably at least 100 square feet or better, 10 square meters.

- Privacy—people must have time to work in deep concentration without interruption.
- Personal control of heating, cooling.
- Outside air supply—quality air at all times.
- Ergonomic Furniture.
- Day lighting, access to windows; adequate indirect area lighting and task lighting.
- Responsive telephone, communication and computing service.
- Flexibility—the ability to meet changing mission and reorganizations.

Think about it. You can greatly enhance mission execution, improve the company bottom line, and build the morale of our workers by providing work space that is inspiring, comfortable, healthy, safe and sustainable.

POC is Thomas Rutherford, (703) 604-5585. PWD

Thomas R. Rutherford, PE, is the Assistant for Engineering and Construction, Office of the Secretary of Defense.

### **New software** helps with compliance strategies

by Robert W. Fenlason, III

he US Army Center for Public Works (USACPW) and the US Army Construction Engineering Research Laboratories (USACERL) have pooled their resources to develop a new decision support tool. The Air Compliance Advisor (ACA) is a software package designed to help Army installation personnel involved with air pollution management to investigate potential cost-effective compliance strategies. It can also be used to help determine applicable regulatory requirements and calculate actual and potential air pollution emissions.

The ACA considers:

- Source characterization
- Emission reduction techniques.
- Permit requirements.
- Existing air pollution regulations.

Results from the various analyses performed by the ACA are presented in a concise, non-biased manner. They can then be used by installation level air pollution managers to address the requirements of Title I (Attainment and Non-attainment), Title III (Hazardous Air Pollutants), and Title V

### **Submit your articles** and photographs to the **Public Works Digest**

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(Permits), as well as the requirements for other environmental programs and policies.

The many recent ACA improvements, such as emission estimation algorithms, dispersion modeling, pollution prevention suggestions, and user extendibility, need to be field-tested. Any DPW staff or other potential users interested in assisting with testing the ACA software are encouraged to do so. This test phase, performed by installation users, can help ensure that additional modules planned for this year will be based on a data structure that users have reviewed. Volunteer input at this stage will also allow for modifications that meet specific user needs.

Completion of a Test Questionnaire Form is included with the documentation to assist with the evaluation. Suggestions relating to the ease of use, the types of analyses available, and the data structure are particularly needed. The test does not require a large time commitment and can be completed by working through the ACA User Guide, which includes several sample problems.

The ACA software and User Guide are available from the CERL ACA WEB site (i.e., http://quattro.me. uiuc.edu/~acad/). Feel free to visit this site where notices are posted on ACA development, papers and reports related to the ACA, and answers to frequently asked questions (FAQ). The ACA software and User Guide are also available from the Defense Environmental Network and Information Exchange (DENIX) and the EPA CTC bulletin board system.

If you would prefer to have the ACA software and/or the ACA User Guide sent to you, please contact Michael R. Kemme at 1-800-USA-CERL or e-mail (m-kemme@cecer.army.mil). The CPW POC is Robert W. Fenlason, III, CECPW-ES, (703) 806-5201 DSN 656 or e-mail: bob.w.fenlason@cpw01. usace.army.mil

Robert W. Fenlason, III, works on air pollution management issues at CPW.

### **Army adds funds for facility disposal**

by Greg Brewer

The Army continues to be extremely successful with its efforts to reduce unneeded facilities. Through FY 97, installations have disposed of over 40 million square feet of excess space. However, the inventory base remains far more than the Army requires or can afford.

The Army currently has approximately 150 million square feet of unneeded facilities, and the FY 98-03 Program Objective Memorandum (POM) funding is inadequate to fund operation and maintenance (O&M) costs for even required facilities. Therefore, the Army has embarked on an ambitious program to reduce its unneeded inventory. For each year of POM FY 98-03, HQDA has programmed \$100 million for facility disposal. While this funding line is insufficient to accomplish all needed demolition, it will make a significant contribution to the reduction program.

An implementation message on the Facility Reduction Program (FRP) has been sent to all landholding MACOM Engineers. The message requires an FRP plan be submitted to receive any of the FRP funding and provides the information required to submit the plans with a deadline of 30 June 1997. Plans should reflect manageable projects at the installation level and indicate type of funding required and renovation costs, if applicable.

The predominant use of FRP funding will be focused on the economical demolition of excess, vacant infrastructure; however, use of FRP funds to

cover renovation costs has not been entirely ruled out. Funding will be allocated based on timeliness of plan submission, cost efficiency, and contribution to the Army's overall FRP effectiveness. HQDA FRP funding guidance for FY 98 will be issued in early August 1997.

The FRP was born out of the shortage of O&M funding and the desire to maintain required facilities. Beginning with FY 98, HQDA ceased programming operation and maintenance resources for excess facilities.

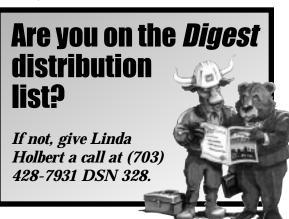
Limited funding is still programmed to prevent unneeded facilities from becoming "attractive nuisances" while awaiting disposal. The programmed amount is \$.31 per square foot per year, with an additional \$.42 per square foot programmed in FY 98 to layaway the unneeded facilities. From FY 99 and out, only \$.31 per square foot of excess facility is programmed and that is above and beyond the FRP funding.

Also, no funds for utilities have been programmed for these unneeded facilities or will be in the future, as installations are expected to vacate them and cap off utilities.

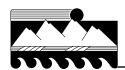
Finally, disposals associated with replacement construction may be funded from MILCON resources on the same DD 1391 as the construction project. HQDA can obtain support for this action if the disposal is on the same installation and directly related to the construction. Facilities funded for demolition on a DD 1391 will not be funded for disposal from other resources.

The FRP is being managed for the Assistant Chief of Staff for Installation Management (ACSIM) by Robert Conte, DAIM-MD, (703) 614-3987.

Greg Brewer works on installation planning issues in the Plans & Operations Division of the ACSIM.







ith its sealed containers of used oil, locked cabinets of hazardous material and bulletin boards full of safety and environmental news, the 1st Aviation Brigade Motor Pool at Fort Rucker, Alabama, is a model mix of military business and environmental responsibility.

It's also the mark of retired SGT 1st Class Oscar Holliday, the brigade's former noncommissioned officer in charge of hazardous materials.

"Four years ago, you could walk through that area and come out with pages of environmental violations," said Tom Walker, an environmental protection specialist in Fort Rucker's Environmental Directorate. "Nobody really emphasized environmental considerations. But through Sergeant Holliday's help and our persistent efforts to educate the units, they've all come to realize the environment is a part of life."

Holliday, who retired in March, knew little of environmental matters when bosses gave him the post about four years ago. But rather than take his chances and train on-the-job, he went to the experts for help.

"I was in Mr. Walker's office almost every day," said Holliday, who also was

### NCO's gift to brigade—a better compliance record

by Mike Buckley

"On a scale from one to ten, that unit was a one. Since Sergeant Holliday took over, they've gone to a ten. 99

> —Tom Walker, Fort Rucker environmental protection specialist

the 1st Aviation Brigade's NCO in charge of maintenance. "I just asked him questions and we went over everything."

Walker helped Holliday develop the brigade's standard operating procedures for environmental compliance, including inspection checklists that cover federal and state requirements. With information collected from the environmental staff, Holliday coordinated awareness and training programs for the brigade, and updated company commanders and environmental representatives.

As it does with all Fort Rucker units, the Environmental Directorate provides tools to make the job easier. It bought the motor pool a machine to drain used oil filters, a pump to prepare aerosol cans for recycling, and the hazardous-materials storage shed. Walker supplemented Holliday's inspections with his own spot checks so the brigade could correct any shortcomings before a surprise visit from regulators.

Not that there's been much to fix lately. Nearly all the brigade's division earn "commendable" inspection marks, where only 15 percent made the grade three years ago. "On a scale from one to ten, that unit was a one," Walker said. "Since Sergeant Holliday took over, they've gone to a ten."

Holliday said any NCO tasked with environmental responsibilities can succeed as long as they find the right information and realize the importance of the job.

"First, I'd say to get with the environmental office," he said. "Look over inspection schedules and plan your requirements. Leave no room for mistakes, because there's no room for error when it comes to environmental compliance."

Walker cited Holliday's positive approach to environmental stewardship as his key to success. Holliday said he was just doing his job, but added that protecting the earth extends beyond the Army mission.

"I have a daughter, and I want her to be able to live in a clean environment, said.

"I feel great about this. With support from the command, environmental office and the soldiers, I was able to turn a bad situation into something great. Environmental compliance has been my most challenging job in the Army, but it's very rewarding."

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Mike Buckley is a contributing writer at AEC.

### **DoD working group pores over Safe Drinking Water Act**

he Department of Defense (DoD) recently formed a Safe Drinking Water Act (SDWA) Working Group, comprising representatives from the Army, Air Force, Navy and Marine Corps. The group seeks to help DoD develop drinking water policies, comment on and respond to legislative and regulatory initiatives, and reduce duplication across service lines by exchanging information and consolidating resources.

The Air Force, as the DoD executive agent for the Safe Drinking Water Act, hosts the group's quarterly meetings. During its February 1997 meeting in Washington, D.C., the group discussed ideas for a DoD Safe Drinking Water Act strategy. Members also talked about ways to collect baseline installation data, jointly assess the 1996 SDWA amendments and develop drinking water Measures of Merit.

For more information on DoD's Safe Drinking Water Act Working Group, call Joe Ricci of the U.S. Army Environmental Center Public Affairs Office at (410) 671-1271. PWD



### **Operation Joint Endeavor—integrating environmental** considerations and contingency operations

by MA7 Donald F. Archibald and Stephen W. Hughes, P.E.

ith the signing of the Dayton Peace Accord in December 1995, NATO Armed Forces were quickly mobilized and sent to Bosnia under Operation Joint Endeavor. Approximately 20,000 troops were deployed from staging bases in southern Hungary and northern Croatia and operating bases in northeastern Bosnia.

Operation Joint Endeavor was the largest U.S troop mobilization in Europe since World War II. During the planning stages of the operation, the U.S. Military determined that minimizing risks to human health and the environment and compliance with applicable environmental regulations would be given the highest priorities. Environmental experts from several different organizations worked together to integrate environmental considerations into the Army's daily operations and solve issues associated with these operations.

The U.S. military retained Brown & Root, under the U.S. Army Corps of Engineers' Logistics Civilian Augmentation Program (LOGCAP) Contract, to provide construction, logistics and environmental services for highly mobile U.S. Forces at more than 30 bases in Hungary, Croatia and Bosnia. Working with the U.S. Army Europe (USAREUR) Environmental Office, Brown & Root was tasked to provide the following environmental services:

#### **Environmental baseline surveys**

Working closely with the USAREUR environmental staff, the Brown & Root environmental specialists completed over 30 EBS reports. We found fast track environmental baseline surveys using real-time monitoring devices were a cost-effective method of identifying initial conditions and potential hazards and reducing U.S. liability. These surveys documented environmental conditions during the initial occupancy of the property in order to determine potential health hazards and prevent the U.S. Military from receiving unfounded claims for past environmental damages. Most of the properties surveyed contained no significant environmental or health problems.

#### **Hazardous waste management**

Operation Joint Endeavor's hazardous waste management program was to ensure that all hazardous waste generated by the U.S. Military in the theater of operation was collected, containerized, stored, labeled, recorded, transported

and disposed of in a manner that satisfied all applicable host nation, international and U.S. regulations and guidelines. The international nature of contingency operations made planning for transportation and disposal of hazardous waste difficult in an operation of this size. Therefore, the Environmental Office at USAREUR set up a theater-wide hazardous waste management program focused on simplicity

### **CPW can assist with Wellhead Protection Program**

by Robert W. Fenlason, III

recent study published by the U.S. Environmental Protection Agency (EPA) reports that communities that invest in preventing groundwater (used as a source of drinking water) contamination will most likely save money that might otherwise be spent cleaning up the contamination or providing alternate water supplies. The Safe Drinking Water Act (SDWA) Amendments of 1986 (Section 205, Public Law 99-339) contain provisions to protect the public water supply from all sources of contamination.

Currently, 41 states and territories have been authorized by EPA to develop their own Wellhead Protection (WHP) programs. The following key elements comprise the major requirements for a WHP:

- Delineation of the WHP area (hydrogeological area which contributes groundwater to the well) for each water supply well.
- Inventory of the potential contamination sources within the WHP
- Information for a management plan to control or eliminate the potential sources of contamination and regulate all activities within the WHP area.

 Information for a contingency plan to address alternate water supplies in the event the wells become contaminated.

The EPA study suggests that the cost of responding to a contamination incident significantly exceeds the cost of developing and implementing a WHP program. A ratio of contaminant cleanup costs to a WHP plan preparation cost ranges from 5:1 to 200:1, the study reports. The report concludes that a WHP program offers a less expensive approach to protecting public health and a cost avoidance of future contamination.

The Sanitary and Chemical Division of CPW can help installations prepare a WHP through in-house specialists and an indefinite delivery contract with an Architect-Engineer (AE) firm. The AE can provide the resources needed to determine the WHP area, collect information on the potential contamination sources, and prepare a WHP plan.

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Robert W. Fenlason, III, works on water and wastewater issues at CPW.





Comanche Base, Northeastern Bosnia—A fuel tank truck has skidded off an icecovered road, creating a fuel spill. Quick emergency response cleaned up the fuel spill before it could have a negative impact on the underlying groundwater.

and the reinforcement of environmentally-sound practices used in Europe. This included:

- Establishing soldier-run collection points at unit areas within the base camps, then turning consolidation and transportation activities over to hazardous waste professionals from Brown & Root and DLA.
- Establishing predeployment hazardous waste management contracts by DLA during early stages of deployment to ensure safe disposal.
- Reinforcing hazardous waste collection practices by conducting unit assessments and providing training to soldiers, mayors, commanders and contractors.

#### **Emergency hazardous materials** spill response

The hazardous materials emergency spill response program was set up to provide a rapid response and clean-up capability, teaching us that:

- Spill response contracts need to be set up prior to the deployment in order to have the capability to react quickly from the beginning.
- The level of environmental aware-

- ness within a country will impact the level of environmental expertise that can be provided by local contractors.
- Integrating the spill response duties into the hazardous waste management program can reduce operational costs and increase military effectiveness.
- Rapid spill response reduces cleanup costs and future liability.

We completed these environmental tasks under a very aggressive schedule during the deployment phase of Operation Joint Endeavor (December 1995 to April 1996). As we operated within the widely-varied host nation and U.S. environmental regulations and guidelines, we learned several important lessons:

**Environmental stewardship starts at the top.** Early in the operation, the commanding general signed a memorandum directing commanders to establish environmental officers at the unit level and ensure that hazardous wastes were disposed of through the proper channels (Defense Logistic Agency). This action clearly placed a high priority on environmental affairs and set the tone for all the operations that occurred during deployment.

It is important to integrate environmental staff into the operations at the earliest possible opportunity. Environmental staff were involved in

the initial planning of deployment operations in order to set up systems to address environmental issues before they become problems. These systems were crucial factors in minimizing environmental incidents during the deployment's rapid and hectic pace.

You must designate environmental authority early and often. Operational plans for the deployment included an environmental annex which created an environmental framework, established responsible parties and gave general guidance on how to handle environmental issues in the new theater of operation. This assignment of accountability ensured that environmental affairs remained a high priority during the execution of all deployment operations.

You must clearly understand the environmental regulatory requirements within the countries where the contingency operation is taking **place.** We spent a significant amount of time during the deployment learning about the environmental programs of the countries within the theater of operation. Greater knowledge of the host nations' environmental regulatory requirements up front would have allowed U.S. Forces to receive approval from the appropriate regulatory authorities to set up and operate base camp support systems and infrastructure more quickly.

The successful establishment of environmental programs in a contingency operation of this magnitude marks a new chapter in DoD environmental stewardship. Military personnel, civilians, and contractors worked in close coordination, leveraging their knowledge and skills to successfully complete the environmental mission. As a result, the innovative approaches used to establish these programs and solve problems are being incorporated into Army doctrine and training.

POCs are MAJ Donald F. Archibald, tel. 49-6181-88-9097, and Stephen W. Hughes, P.E., (412) 921-7169. PWD

MA7 Donald F. Archibald is assigned to the USAREUR DCSENG, Environmental Office, Heidelberg, Germany, and Stephen W. Hughes, P.E., works for Brown & Root Environmental, Pittsburgh, PA.



### by Alexandra K. Stakhiv

"Newburgh, New York, was not the greatest neighborhood to grow up in," said Crispus Sawyer of CPW's Sanitary and Chemical Division, "so my parents sent me to a series of private schools." After graduating from the Campion Academy in Loveland, Colorado, a Seventh-Day Adventist high school, he went on to Howard University in Washington, D.C., where he earned a degree in chemical engineering.

While still in college, Cris worked for the structural engineering firm of Meyer Consulting Engineers, P.C. Although he was made an inspector upon graduation in 1993, he left when the Navy beckoned. Hired as an environmental engineer for the Navy Public Works Center, he handled all aspects of hazardous waste management, disposal, handling and compliance and quickly learned the tools of the trade. Working out of the David Taylor Research Center in Carderock, Maryland, he took care of the Navy's hazardous

waste problems as well as any other organization's that contracted for his services.

"I was the base coordinator for hazardous waste and gained a lot of valuable experience with the Navy, but I could not help feeling that something was missing," said Cris. "I wanted to learn more and do more. I wanted to use my mental abilities to their fullest potential, and I had already learned everything I needed to know for this job."

Cris applied for a position with CPW after seeing a job announcement on the web. He was hired by CPW's Engineering Directorate in August 1995. "I was happy when I got this job, because I knew I would finally get to apply all the things I had learned in school," remembered Cris.

"With the Navy, I did not need my education to do the job. They had wanted an engineer because they knew that an engineer would finish the job. Here at CPW, it's different— I need to be familiar with several diverse technical areas and be able to get varied information to the people who need it. As the backup man for several program areas, each with a different specialty, I have to know about every-

### **Crispus Sawyer** Sanitary and Chemical Division



(Photo by Richard Brown.)

thing we do in the Sanitary and Chemical Division. I'm still learning."

"I travel on the average of about once a month to installations doing anything from boiler water treatment evaluations to kickoff meetings. I recently participated on an evaluation at the Presidio of Monterey in California. My colleague and I put in 10-hour workdays to cut the cost of flying our contractor out there for the testing. We used BRAC funds to do another evaluation in Denver. I will also be teaching at our workshops. I have my first presentation on the characteristics of water and safety coming up at our Boiler Water Workshop here at Belvoir."

Visiting installations, Cris has found that not enough of them take advantage of programs available to them. For example, installations can take samples and get them analyzed through CPW's Boiler Water Quality Assistance Program. For many instal-

lations, this service is already paid for by their MACOM like FORSCOM and TRADOC.

"It's important for long equipment life that you treat your boilers correctly," said Cris. "You'll receive professional lab results and find out just how effective your current boiler water treatment is. Remember that good water treatment can prevent boiler damage."

Cris is always ready and willing to help installations with their boiler or cooling water questions and problems. "Don't be fooled by looks" are Cris' parting words of advice. "Corrosion and scale could be happening in your system and you wouldn't even know it. Make sure you get your water analyzed before it's too late. The Sanitary and Chemical Division can assist your installation in establishing and maintaining an effective industrial water treatment program."

Named for the Revolutionary War hero Crispus Attucks, Cris enjoys reading about black history. He spends any leftover energy is playing basketball or cycling. You may reach him at (703) 806-5206 DSN 656 or e-mail: cris.e.sawyer@ cpw01.usace.army.mil. PWD



### **Guidelines help installations map vegetated areas**

by Stephen H. Goldstein

The Conservation Branch of the U.S. Army Environmental Center has sponsored a project to develop guidelines for classifying and mapping plant communities on Army installations. The four Army Corps of Engineers research laboratories— The Construction Engineering Research Laboratories, Cold Regions Research and Engineering Laboratory, Topographic Engineering Center, and Waterways Experiment Station— share the work on the project, the first of its kind.

This project seeks to establish guidelines adaptable to the needs of individual installations, rather than producing a single set of Armywide standards. The guidelines would help installations produce quality vegetation maps that meet the needs of installation land managers, remain compatible with other agencies' products and meet Federal Geographic Data Committee standards.

The Defense Department requires all installations to conduct planning-level surveys that include vegetation communities, said Dr. Paul Thies, chief of the USAEC Conservation Branch. USAEC provides guidance and technical assistance on meeting the DoD requirement. Vegetation mapping is a key piece of information for managing

resources, Thies said, and critical for managing and conserving soils, vegetation and wildlife.

This project includes four major tasks. First, researchers determined the status of vegetation maps at 34 Army installations. Then they identified all federal government, Defense Department and Army requirements for vegetation mapping. They also learned how and why other agencies map plant communities.

They met in August 1996 to review their findings and to see which of these mapping procedures meet the Army's needs. Researchers plan to have draft guidelines by June 1997 to help installations determine, for example, the best mapping unit size, classification level, and accuracy level for their management needs.

The Army guidelines are unique. A spokesman for the Center for Biological Informatics at the U.S. Geological Survey Biological Resources Division said the center has been working in partnership for the past several years with the National Park Service to map vegetation on Park Service lands.

In September 1996, a peer review of the project identified a need for these mapping guidelines, which will be developed so that they may meet Geological Survey and Park Service purposes. Park managers will understand the program's standard vegetation map products and how to modify these products for a park's specific requirements, the spokesman said.

The Army guidelines will allow installations to classify and map vegetation according to their specific needs. For example, less biologically significant sections of an installation could be mapped in general terms while significant areas could be mapped with greater detail.

Specific users should be able to define applications and their information requirements, Thies said.

For more information about the Army's vegetation mapping efforts, please contact AEC's Paul Dubois at (410) 612-7079. PWD

Stephen H. Goldstein is a contributing writer at AEC.

# Army and environment share a strong link

by GEN Dennis J. Reimer, U.S. Army Chief of Staff

administration passed the National Environment Policy Act, there has been increased emphasis on environmental stewardship in both the private sector and within the Army. We have made great strides and I am proud of what has been accomplished since 1969.

Care and concern for the environment has literally become a way of life for of us. We have learned the importance of factoring in care for the environment when acquiring and maintaining equipment, conducting training, and carrying out our missions at home and abroad. We understand that good environmental stewardship is a combat multiplier for the future.

The Army's 1997 Earth Day theme — "Environmental Integration: Keystone to Readiness, Cornerstone for Quality of Life" — reflects that new understanding and underscores the importance the environment plays in our lives. The quality of our future training and readiness, as well as the quality of life for the entire Army family, will be influenced in large part by how well we make this theme come alive.

There are a number of key and relatively simple things that each of us can do to show our concern for the environment. Things like putting used oil or antifreeze in the proper place for safe disposal, recycling materials we once threw away, ensuring that environmental concerns are part of our training program and other common sense things will go a long way to ensuring that the soldiers of the 21st century enjoy the same opportunities we do.

As I said, I am proud of all we've accomplished, but we must continue to "recycle" in this important area so that all understand the importance we attach to environment. By practicing a sound environmental ethic each day, we all contribute to mission readiness while protecting our precious environment. All of us must do our part to protect and preserve the environment for future generations. I challenge each member of the Total Army team to look for ways — not only on Earth Day but every day — to improve our awareness of the environment and to ensure that we protect it for future generations.

Soldiers are our credentials. PWD



### **Installations honored for environmental efforts**

as your installation recently received an environmental salute?
Here are three Army installations recently recognized for their outstanding environmental achievements:

#### Joliet Project Team Receives Illinois Award

The state of Illinois recognized the Joliet Army Ammunition Plant (JOAAP) Remedial Project Team for its environmental cleanup work at the former TNT and munitions maker. JOAAP is being cleaned up as part of a plan to transfer more than 19,000 acres to the U.S. Forest Service to become the Midewin National Tallgrass Prairie.

On Nov. 6, 1996, the state presented certificates of commendation to Janet Beavers, the team's project manager from the U.S. Army Environmental Center; Art Holz from JOAPP; and Chuck Malin from the Omaha District, Corps of Engineers. Beavers also received the Illinois Environmental Protection Agency Director's Award for Excellence, the highest award conferred by the Illinois EPA.

#### **Wisconsin Honors Fort McCoy**

Fort McCoy won the Wisconsin Department of Natural Resources (DNR) Prevention/Environment/Prosperity award for July 1996. George Meyer, Wisconsin DNR director, applauded Fort McCoy's efforts to reduce pollution and find beneficial reuses for a variety of products.

The monthly award recognizes businesses and organizations that show leaders increasing efficiency and productivity while cutting pollution. In one instance, Fort McCoy substituted aluminum oxide blasting pellets for sand in a paint removal system. The change reduced the weekly amount of hazardous waste generated in the process from 12 tons to one ton.

Other actions included a change from coal-fired boilers to natural gas and propane fuels, which cut emissions of carbon dioxide by 98 percent, sulfur dioxide by 95 percent and ozone-forming nitrogen oxides by 91 percent. A new paint spraying system cut volatile organic compound (VOC) emissions in half.

### Kansas Governor Salutes Fort Leavenworth

The Kansas Historic Preservation Office and the Office of the Governor presented Fort Leavenworth with the 1996 Governor's Award for Historic Preservation in both the Government and Education categories. The annual award recognizes significant contributions made by individuals and organizations to historic preservation in Kansas.

All projects within the 213 acres of the post's National Historic Landmark District are overseen by the Fort Leavenworth historic architect and coordinated with the Kansas State Historical Preservation Officer and the Advisory Council on Historic Preservation. The installation earned the education award for developing a comprehensive and innovative preservation plan to protect each archeologically significant building and structure site on the fort.

Fort Leavenworth took the government honors for its renovation of the "Beehive," a 110-year-old building originally used as married officers' quarters.

POC is AEC Public Affairs, (410) 671-2556. PWD

### Conservation groups boost Fort Riley wildlife programs

by Dave Jones

ort Riley's Directorate of Environment and Safety-Natural Resources Division has joined with several nonprofit conservation organizations to develop partnership agreements that benefit fish and wildlife on the Kansas installation.

Conservation organizations have donated money, equipment and logistical support. The installation's Fish and Wildlife Account has received more than \$83,000 since 1992, and the donations defray the costs of habitat improvement and population monitoring projects.

Fort Riley has a long-standing and unique partnership with the Rocky Mountain Elk Foundation to aid elk management on Fort Riley. This year, the Elk Foundation agreed to donate \$8,500 to help pay for wildlife food plots and an aerial census of Fort Riley's elk herd. The Foundation has given \$16,000 to the installation since 1992, helping to pay for food plots and radio-tracking collars for elk.

The Elk Foundation has provided "muscle" as well as money, donating a truck trailer and labor to bring 18 elk to Fort Riley for reintroduction in 1994.

Another conservation organization, Quail Unlimited, donated more than \$7,500 in 1992 toward the planting of wildlife food plots. The group also provided a root plow to help Fort Riley manage and rehabilitate quail habitat.

Ducks Unlimited agreed in 1996 to develop waterfowl habitat and provide technical assistance for managing existing waterfowl habitat areas on Fort Riley. The partnership — the first ever between the Department of the Army and Ducks Unlimited — matches Fort Riley funds dollar-for-dollar and will put more than \$100,000 into Fort Riley waterfowl habitat projects.

The agreement also includes the donation of a water pump and plow-like device called a Malsam Terracer. The \$20,000 pump will allow Fort Riley to actively manage its water levels, rather than depend solely on rainfall. Installation staff will use the Malsam Terracer to build and maintain berms for shallow-water impoundments.

The critical ingredient to these partnership agreements is leadership. Fort Riley, under the leadership of MG Michael Dodson, recognizes that private, nonprofit conservation organizations can be part of shared environmental stewardship.

POC is Dave Jones, (913) 239-6211 DSN 856.

Dave Jones is the Fort Riley Fish and Wildlife Administrator.



## HOGSSOIR DAGOON

ithin the past two months, CPW's Professional Development and Training (PD&T) Division has acquired several new faces. Philip Reed, Dennis Milsten and Rodney Flath are the latest additions to the PD&T team.

Philip Reed came to the U.S. Army Center for Public Works from HQ, US Army Europe, Office of the Deputy Chief of Staff, Engineer. He has worked primarily with Stationing, base closures, troop construction, Army Stationing and Installation Plan (ASIP) and HQRPLANs. Prior to working at USAREUR ODCSENGR, he was the Chief of Engineering Plans and Services for the 235th Base Support Battalion DPW at Ansbach, Germany and has served as Chief of the Job Order Contracting Branch, Contract Inspection Branch and Installations Branch. Reed has also worked on the "Partnership-for-Peace" troop construction projects in Romania. With PD&T, Reed has assumed the role of the new course manager for the Public Works Management Orientation Course and is developing the new Engineering Plans and Services Skills Course.

Dennis Milsten joined us from the Corps of Engineers, Baltimore District, Pentagon Renovation Office. While there, he served as the Chief of Technical Management, responsible for the day-to-day execution of the design and construction effort to renovate the Pen-

### **Newest additions** to PD&T

by Mary Csontos

tagon. Prior to that, Milsten was the Contracting Officer's Representative at Fort Drum for the Army's 801 Housing Lease Program. He has also served at several locations and various duty positions with the New York District. He is an active member of the Society for Military Engineers, and the Construction Managers Association of America. Milsten is also an instructor for the Corps of Engineers PROSPECT program, teaching the Construction Quality Management and Construction Contract Management courses. At PD&T, he'll be the course manager for the Public Works Management Functional Course, and reintroduce the Basic Orientation Course and the Executive Seminar.

Rodney Flath has over fifteen years of installation experience at Fort Ritchie, and has served as Chief, Engineer Plans and Services; Chief, Building and Grounds; and Chief, Design Branch. He also worked for the Facilities Engineer Support Agency (FESA) and was directly involved in the test program to field Job Order Contracting. Prior to his tenure with the Department of the Army, Flath also worked for many years as an engineer for consultants and the private industry.

Philip Reed, Dennis Milsten, and Rodney Flath are all superb additions to the already outstanding PD&T staff, and we would like to officially welcome them. You may reach them at:

- Philip Reed (703) 428-7587 DSN 328
- Dennis Milsten (703) 428-6994 DSN 328
- Rodney Flath (703) 428-7548 DSN 328. PWD

Mary Csontos is an editor (student trainee) in CPW's Professional Development and Training Division.

### **DPW Training** Workshop update

PW's Professional Development and Training Division is once again sponsoring the annual **U**DPW Training Workshop. It'll be conducted in the Washington, D.C., metro area, 9-11 December 1997, upon approval by Corps Headquarters. The hotel site is still being finalized and a selection will be made in late June.

An information packet containing suggested topics and guest speakers will be sent to the field for comments and input in June. Please be on the lookout for the information packet and give us your feedback so we can make this workshop a complete success. We look forward to full participation from all elements of the Corps of Engineers

If you have any questions or suggestions, please contact Tom Cook at (703) 428-6036/DSN: 328, FAX: (703) 428-7541 DSN 328, or e-mail: tom.e.cook@cpw01. usace.army.mil PWD

### **New phone numbers for Professional Development and Training**

by Mary Csontos

e've recently undergone some rearranging in the Professional Development and Training (PD&T) Division, and therefore, some of our staff have new phone numbers. Jim Ott, the Support Team Leader, can now be reached at (703) 428-7217 DSN 328. Phil Reed, the new course manager for the Public Works Management Orientation Course (PWMOC), can be reached at (703) 428-7587 DSN 328. The rest of the PD&T staff's phone numbers remain the same. If we can be of any assistance, please don't hesitate to give us a call at (703) 428-7547 DSN 328. PWD



### Tri-service CADD/GIS/FM Symposium '97

onsidering using GIS on your installation? Perhaps you're already well into adopting this new management technology. Either way, the 18-22 August Tri-Service Symposium in St Louis, Missouri, is a great way to hear about and see firsthand all the uses for computer-aided design and drawing, geographic information systems, and facility management (systems) for installation management. In the last year, we have seen an almost revolutionary change in this technology, so even those from installations with a well-developed implementation plan will want to attend.

The latest mailing contains a schedule overview, hotel and transportation information, and a registration form. If you haven't received it, get it from the St. Louis District Website (http://www.lms.usace.army.mil). You can even register on-line — a good idea, if you want to be certain of getting into some of the smaller group workshops.

POC is Rik Wiant, CECPW-FP, (703) 428-6086 DSN 328.

### Heidelberg looking for master planner

Toufic Alhaj, veteran planner at the 26th ASG, DPW, will be returning to the States in the very near future, and the DPW is actively looking for a GS-801-12 replacement. Inquiries and/or applications should be sent to David Peckham, e-mail: Peckhamd@ asgdpw.heidelberg.army.mil, DSN is 370-7859, commercial is 49 6221 57 7859, and FAX number is 496221578853/8851.

# **CPW adds two new Planning and Real Property PROSPECT courses**

We are adding two new courses to the existing PROSPECT programs for Army Master Planners and Real Property Specialists.

Starting in August 1997, we are offering a Real Property Applied Skills Course on 12-14 August 1997. (For more information, please contact Alexis Wathen at (703) 428-7465.) We are also offering a Master Planning Tools Applied Skills Course on 26-27 August 1997. (For more information, please contact O.W. Evans at (703) 428-6084.)

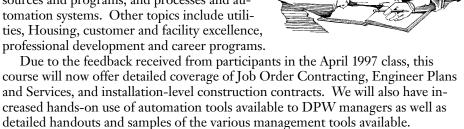
Both courses are intended to provide direct, hands-on training with Army automated systems, including the Real Property Module (RPM) for Applied Skills Real Program course, and RPLANS\HQRPLANS for the Applied Skills Master Planning course.

OC is O.W. Evans, CECPW-FP, (703) 428-6084 DSN 328.

# **Public Works Management Orientation course**

The Public Works Management Orientation course is a dynamic and rewarding two-week training session designed for Military and Civilian DPW managers—both active and reserve components. This indispensable course covers the administration, organization, functions, and management systems of the installation DPW. The course offers classroom discussions, individual reading assignments, practical exercises, and an examination. The classroom instruction includes lectures and seminars in a "give and take" atmosphere presented by experienced guest speakers from HQDA, CPW, US Army Corps of Engineers (COE), and installation DPW personnel.

The Public Works Management Orientation course gives DPW managers an opportunity to stay current on fast breaking and timely issues and to share hardwon solutions with contemporaries. Issues such as privatization, contracting DPW services, credit cards, Reserve Component installation, and current and evolving technologies are presented. Students learn the different functions of the DPW, funding sources and programs, and processes and automation systems. Other topics include utilities, Housing, customer and facility excellence, professional development and career programs.



The Public Works Management Orientation course is offered three times per year in Alexandria, Virginia, and up to two times per year OCONUS. The course is scheduled for Panama in the 4<sup>th</sup> quarter of FY 97 and for Germany and Korea in FY 98. For additional course information or questions, please contact Phil Reed at (703) 428-7547 DSN 328 or by e-mail: phil.l.reed@cpw01.usace.army.mil



### **FY 97 USACPW Training Schedule**

he US Army Center for Public Works Professional Development and Training Division provides systematic training management for approximately 150 Army installations worldwide. The Army's DPW (Facilities and Housing) Training Program is comprised of 25 basic courses executed about 80 times annually. About 1,900

students from all MACOMs, CONUS and OCONUS, are trained annually.

Here's the USACPW fourth quarter training schedule for those individuals interested in training. To register for a USACPW course, please FAX a copy of your completed DD Form 1556 to the registrar at (703) 428-7541 DSN 328, or mail a copy to U.S. Army Center For

Public Works, ATTN: CECPW-FT (Registrar), 7701 Telegraph Road, Alexandria, VA 22315-3862.

For questions concerning course information such as course descriptions and prerequisites, please contact the registrar at (703) 428-7593 DSN 328 or e-mail: cpw-ft.registrar@cpw01.usace. army.mil.

	DATE	COURSE LOCATION
July	8-10 JUL 97	Job Order Contracting Advanced Course (451-003)Holiday Inn, Fair Oaks, VA
	14-18 JUL 97	IFS-M Supply (509-002)Kingman Bldg, Alexandria, VA
	14-17 JUL 97	Job Order Contracting Basic Course (450-004)Holiday Inn, Fair Oaks, VA
	*14-25 JUL 97	Public Works Management Orientation Course (310-004)Comfort Inn, Springfield, Va
	22-24 JUL 97	IFS-M Contract Administration (504-002)Kingman Bldg, Alexandria, VA
	28 JUL -1 AUG 97	DPW Functional Course (340-001-97)
	*28 JUL -8 AUG 97	Army Housing Operations (101-004)
		(Overnight Stay) Days Inn, Springfield, VA
August	5-7 AUG 97	Job Order Contracting Advanced Course (451-703)On-Site Avail
	*11-15 AUG 97	Advanced SQL For IFS-M (501-002)Kingman Bldg, Alexandria, VA
	11-15 AUG 97	Public Works Management Orientation Course (Panama Specific Presentation) (310-703)Panama
	11-15 AUG 97	Army Housing Facilities (150-002)
	11-14 AUG 97	Job Order Contracting Basic Course (450-707)On-Site Avail
	18-22 AUG 97	Army Housing Mid-Level Management (112-004) (Tentative based on enrollment)
per	8-12 SEPT 97	AdvancedSQL forIFS-M
	8-12 SEPT 97	IFS-M for Senior DPW ManagersUSAREUR
Sep	15-26 SEPT 97	Army Housing Operations (101-702)

NOTE: There are several courses still under development. As soon as they are available for enrollment, we will make changes to the schedule. Look for any updates on the world wide web at http://www.usacpw.belvoir.army.mil. Hard copy changes will also be sent to MACOM's for distribution.

NOTE: Courses listed in italics are for USAREUR ATTENDEES ONLY. PWD

<sup>\*</sup> Dates and locations are subject to changes.

# Public Works

### In This Issue:

**Count on CPW contracts** 

**Army adds funds for facility disposal** 

Fort Hood covers trash with plastic

**Guidelines help classify and** map vegetation